

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. 10/674,023
Applicants: David W. Pedlar et al.
Filed: September 29, 2003
Group Art Unit: 2617
Examiner: Casca, Fred A.
Title: Apparatus and Method for Handling Cell Update During
Reconfiguration in Universal Mobile Telecommunications
System User Equipment
Confirmation No.: 4511
Docket No.: 1578.620 (11157-US-PAT)
Customer No.: 44208

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT'S BRIEF ON APPEAL

Dear Sir:

This brief is submitted in triplicate on behalf of Appellant for the application identified above. The Commissioner is hereby authorized to charge any fees which may be required pursuant to this Brief, or credit any overpayment, to Deposit Account No. 504515.

TABLE OF CONTENTS

Appeal Identification	1
Table of Contents	2
Real Party in Interest	3
Related Appeals and Interferences.	4
Status of Claims	5
Status of Amendments	6
Summary of Claimed Subject Matter.	7
Grounds of Rejection to be Reviewed on Appeal	9
Argument	10
Claims Appendix	14
Evidence Appendix	18
Related proceedings Appendix	19

Appl. No. 10/674,023
Appeal Brief dated July 1, 2010
Response to Final Office Action of February 5, 2010

REAL PARTY IN INTEREST

The real party in interest is M-Stack Limited. The assignment of the application to the real party in interest is recorded at reel/frame number 024475/0671.

Appl. No. 10/674,023
Appeal Brief dated July 1, 2010
Response to Final Office Action of February 5, 2010

RELATED APPEALS AND INTERFERENCES

There are no currently-pending appeals or interferences related to the present application.

STATUS OF CLAIMS

In the final office action of February 5, 2010, claims 1, 3-4, and 6-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pre-Grant Publication 2003/0231612 by Kim, et al. ("Kim") in view of published TSG-RAN Working Group 2 - TSGR#2(99)181 ("TSGR#2(99)181"). Also, claims 5 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kim in view of TSGR#2(99)181 and further in view of Examiner's reliance on common knowledge.

All of the claim rejections are being appealed.

Appl. No. 10/674,023
Appeal Brief dated July 1, 2010
Response to Final Office Action of February 5, 2010

STATUS OF AMENDMENTS

The present Appeal is taken from the Final Office Action of February 5, 2010.
Appellant has not submitted amendments following this Final Office Action.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a method of performing a user equipment "cell update" (as described at paragraphs [0007]-[0008] and Fig. 2) during a "reconfiguration procedure" (as described at paragraphs [0005]-[0006] and Fig. 1) in a communications system. A reconfiguration command is received, including an activation time that delays the application of reconfiguration until the activation time is reached, as described at paragraph [0031] and Fig. 7. A trigger event is detected, indicating a cell update is required. The initiation of cell update is delayed until the reconfiguration is applied (paragraphs [0031]-[0032]).

Independent claim 3 is directed to a method of handling a user equipment "cell update" (as described at paragraphs [0007]-[0008] and Fig. 2) during a "reconfiguration procedure" (as described at paragraphs [0005]-[0006] and Fig. 1) in a communications system. A reconfiguration command is received at the user equipment, the command including an activation time that delays the application of reconfiguration until the activation time is reached, as described at paragraph [0031] and Fig. 7. A trigger event is detected, indicating a cell update is required but the cell update is suppressed depending upon the trigger event (paragraphs [0055]-[0056]).

Independent claim 6 is directed to user equipment that performs a "cell update" (as described at paragraphs [0007]-[0008] and Fig. 2) during a "reconfiguration procedure" (as described at paragraphs [0005]-[0006] and Fig. 1) in a communications system. The user equipment (paragraphs [0036]-[0038] and Fig. 8) includes a receiver that receives a reconfiguration command, the command including an activation time that delays the application of reconfiguration until the activation time is reached, as described at paragraph [0031] and Fig. 7. The user equipment also includes an event detector that detects a trigger event for a cell update and a controller that delays the initiation of the cell update until the reconfiguration has been applied, as described at paragraph [0031] and Fig. 7.

Independent claim 8 is directed to user equipment that handles a "cell update" (as described at paragraphs [0007]-[0008] and Fig. 2) during a "reconfiguration procedure" (as described at paragraphs [0005]-[0006] and Fig. 1) in a communications system. The user equipment (paragraphs [0036]-[0038] and Fig. 8) includes a receiver that receives a reconfiguration command, the command including an activation time that identifies a delay of the application of reconfiguration until the activation time is reached, as described at paragraph [0031] and Fig. 7. The user equipment also includes an event detector that detects a trigger event requiring a cell update and a controller that suppresses the cell update in dependence upon the trigger event (paragraphs [0055]-[0056]).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 3-4, and 6-9 were properly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pre-Grant Publication 2003/0231612 by Kim, et al. in view of published TSG-RAN Working Group 2 - TSGR#2(99)181.

Whether dependent claims 5 and 10 were properly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pre-Grant Publication 2003/0231612 by Kim, et al. in view of published TSG-RAN Working Group 2 - TSGR#2(99)181, and further in view of Examiner's reliance on common knowledge.

ARGUMENT

The references

Kim is directed to apparatus and method for determining soft handover in a radio system multimedia broadcast/simulcast service (MBMS). Kim describes a Radio Bearer Reconfiguration process as "...a signaling procedure performed when a peripheral environment has changed although a UE does not move." Paragraph [0039]. Kim also describes a Cell Update process as "...a signaling procedure performed when a peripheral environment has changed due to movement of a UE." Paragraph [0039]. To enable a soft handover, user equipment (UE) must be able to soft combine the same MBMS data received from a plurality of cells. See paragraph [0023]. The MBMS timing offset is one of the descriptive parameters found in the information regarding a cell and is conveyed to a UE along with other cell information in a Radio Bearer Reconfiguration. See Fig. 2, numeral 201.

The TSGR#2(99)181 reference has been introduced in a combination with Kim to show that the element of delaying of initiation of the cell update until the reconfiguration has been applied has been previously disclosed. TSGR#2(99)181 states at page 3: "The cell update procedure is used by the UE to inform the UTRAN that the UE has switched to a new cell...[T]he procedure is triggered after change of cell and after the UE has read information broadcasted by UTRAN."

Claims 1 and 6

Appellant's claim 1 states a method comprising the "receiving...a reconfiguration command...including an activation time identifying a delay of application of a reconfiguration; detecting...a trigger event...that a cell update is required; and delaying initiation of the cell update until the reconfiguration has been applied." The technical problem is stated by Appellant: "...if an event occurs that requires a cell update to be invoked while the reconfiguration procedure is ongoing, the current 3GPP standards do not unambiguously define the required behaviour of the UE, so potentially leading to

interoperability problems." Application, paragraph [0007]. As is apparent from method claim 1 (and from claim 6, which claims a corresponding apparatus), Appellant claims a specific conveyance of an "activation time" during which application of the reconfiguration is delayed and also a delaying of the initiation of cell update until the reconfiguration has been applied. Kim discloses neither the specific activation time nor the delay of cell update initiation until the application of the reconfiguration. When Kim sends a Radio Bearer Reconfiguration message to the UE, it does not include a specific activation time. See paragraphs [0057] and [0058] and Fig. 2. Further, Kim's MBMS timing offset is a fixed network characteristic and does not delay the application of the reconfiguration. Kim's Radio Bearer Reconfiguration process is applied upon Kim's Radio Bearer Reconfiguration message being received at the UE. That is, Kim's MBMS timing offset is not implemented as part of Kim's reconfiguration process and completion of Kim's Radio Bearer Reconfiguration process is not dependent upon an MBMS timing offset. See Kim's paragraphs [0047]-[0056].

Since Kim does not disclose a specific activation time, Examiner has stated that the reconfiguration command inherently includes an activation time. It is not clear how or where such an activation time is inherent in a reconfiguration command or application of a reconfiguration. Perhaps Examiner is considering delay times naturally found in processing speeds of physical processors and switches and the like. If there are operational delays, a standard working design would provide enough fixed margin to account for the real world delays. Appellant anticipated this inherent sort of delay when considering a situation where the activation time is set to "Now". The reconfiguration is applied "as soon as the user equipment is able to do so" (paragraph [0015], emphasis added); that is, accounting for inherent delays. Thus it is known that Appellant's activation time is in addition to such inherent operational delays. Also, assuming the foregoing delay to be the inherent delay envisioned by Examiner, such an activation time would necessarily have been a fixed time, a designated time subsequent to receipt of a reconfiguration command, designed into Appellant's system. But Appellant has identified a specific claimed element, the activation

time, that is conveyed to the UE to place the delay of the application of the reconfiguration under the control of the system.

In any event, MPEP §2112 IV states that: "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990, emphasis in original). Appellant believes this reasoning has not been provided relative to a specified activation time. Kim's reconfiguration process does not need a specified delay. If there are operational delays in Kim's system, it is presumed that Kim's system is also designed with margin to account for the natural delays.

Kim does not disclose the claimed delay of initiation of the cell update until the reconfiguration has been applied. TSGR#2(99)181, introduced ostensibly to provide this teaching, merely describes a cell update procedure. Apparently undue significance is placed upon the statement "cell update procedure is...triggered...after the UE has read information broadcasted by UTRAN." Page 3, emphasis added. Nevertheless, Appellant observes two items from the disclosure. First, the cell update procedure is suggested to be triggered after the UE changes cell and after the UE has read the UTRAN broadcasted information, whereas Appellant's claimed invention delays the initiation of the cell update – not the triggering of the cell update. Second, the cell update procedure is triggered after the UTRAN broadcasted information has been read. Reading information is not acting upon information and it is not delaying until another action has taken place. Therefore, TSGR#2(99)181 does not disclose the required delay of initiation of the cell update until the reconfiguration has been applied.

Claims 3 and 8

Independent claims 3 and 8 share features with claims 1 and 6, above, but include the limitation "suppressing the cell update depending upon the trigger event." Neither Kim nor TSGR#2(99)181, alone or in combination, disclose the linkage of the suppressing and the triggering event.

Dependent Claims

Claims 5 and 10 are dependent claims dependent upon presumed allowable independent claims, and are therefore, themselves, presumed allowable. Claims 4, 7, and 9 are also dependent upon presumed allowable independent claims and are presumed allowable.

Conclusion

The combination of Kim and TSGR#2(99)181 does not disclose all of the elements of Appellant's claimed invention, as written in Appellant's claims. Since all of the elements have not been disclosed, a *prima facie* case of obviousness has not been stated and the §103 rejections cannot stand. Appellant respectfully requests that Examiner's rejections of claims 1 and 3-10 be reversed and that allowance of the present Application be directed.

Respectfully submitted,

/Robert H. Kelly/

Robert H. Kelly
Reg. No. 33,922

KELLY & KRAUSE, L.P.
6600 LBJ Freeway, Suite 275
Dallas, Texas 75240
Telephone: (214) 446-6684
Fax: (214) 446-6692
robert.kelly@kelly-krause.com

CLAIMS APPENDIX

1. A method of performing a cell update during a reconfiguration procedure in a user equipment, the user equipment configured for use in a communications system, the method comprising:

receiving, at the user equipment, a reconfiguration command from the communications system, the reconfiguration command including an activation time identifying a delay of application of a reconfiguration until the activation time has been reached ;

detecting, at the user equipment, a trigger event which indicates that a cell update is required; and

delaying initiation of the cell update until the reconfiguration has been applied.

2. (Cancelled)

3. A method of handling a cell update during a reconfiguration procedure in a user equipment, the user equipment configured for use in a communications system, the method comprising:

receiving, at the user equipment, a reconfiguration command from the communications system, the reconfiguration command including an activation time identifying a delay of application of reconfiguration until the activation time has been reached;

detecting, at the user equipment, a trigger event which indicates that a cell update is required; and

suppressing the cell update depending on the trigger event.

4. The method according to claim 3, wherein the user equipment is configured to communicate with a UTRAN in a UMTS communications system, comprising suppressing the cell update depending on the relevance of the trigger event to the UTRAN after reconfiguration.

5. The method according to claim 4, comprising suppressing the cell update when the trigger event comprises a radio link failure.

6. User equipment for performing a cell update during a reconfiguration procedure, the user equipment configured for use in a communications system, the user equipment comprising:

a receiver for receiving, at the user equipment, a reconfiguration command from the communications system, the reconfiguration command including an activation time identifying a delay of application of a reconfiguration until the activation time has been reached;

an event detector for detecting, at the user equipment, a trigger event which indicates that a cell update is required; and

a controller for delaying initiation of the cell update until the reconfiguration has been applied.

7. User equipment according to claim 6, further comprising a timer arranged to cooperate with the controller for delaying initiation of the cell update.

8. User equipment for handling a cell update during a reconfiguration procedure, the user equipment configured for use in a communications system, the user equipment comprising:

a receiver for receiving, at the user equipment, a reconfiguration command from the communications system, the reconfiguration command including an activation time identifying a delay of application of a reconfiguration until the activation time has been reached;

an event detector for detecting, at the user equipment, a trigger event which indicates that a cell update is required; and

a controller for suppressing the cell update in dependence on the trigger event.

9. User equipment according to claim 8, wherein the user equipment is configured to communicate with a UTRAN in a UMTS communications system, and wherein the controller is arranged to suppress the cell update depending on the relevance of the trigger event to the UTRAN after reconfiguration.

10. User equipment according to claim 9, wherein the controller is arranged to suppress the cell update when the trigger event comprises a radio link failure.

Appl. No. 10/674,023
Appeal Brief dated July 1, 2010
Response to Final Office Action of February 5, 2010

EVIDENCE APPENDIX

None known.

Appl. No. 10/674,023
Appeal Brief dated July 1, 2010
Response to Final Office Action of February 5, 2010

RELATED PROCEEDINGS APPENDIX

None known.